

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 1

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: JUL 09 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4464	H

100 Weld per dwg A/R Aluminum rod Batch: 4130107 0.00
100 Large Fab Memo 0.00
 Large Fab 1- Weld D4023-3 cap as per dwg D4464

Achtung!
 Vor Einbau Sicherungsstift herausnehmen
Attention,
 remove safety pin before installation
Atenção!
 Remova o pino de segurança antes de montar

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00
110 QC Memo 0.00
 Quality Control

112 0.00
112 Small Fab Memo 0.00
 Small Fab 1- Wet install baffles to front and back panel using rivet and Proseal as per dwg
 A/R Proseal Batch: M132226

DAS
43
9-89 JUL 2 2015

DAS
24
9-89 JUL 21 2015

DAS
36
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 3

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

120

Large Fab

Large Fab

Weld per dwg A/R Aluminum rod Batch: 130855 0.00

Memo

0.00

1- Weld D4001-1 and D4000-5 onto D4463-1 Top

2- Weld D3999-041/-043 doubler, ensure doubler and angle holes line-up for D4000-047

Transfer drill and c'sink D4975-1 bracket to bottom bracket, wet install as per dwg

Proseal 890B Batch: 132655

3- Weld D4000-043 and D4000-045 on tank as per dwg.

4- Instal D4000-9 grommets as per dwg, Weld D4463-3 aft end as per dwg, locate D4000-1 and wet install with rivets as per dwg. ***D4000-1 FLAT SURFACE MUST BE INSTALL UPWARDS AS PER DWG***

Proseal 890B Batch: 132655

5- Install hinge wet with proseal as per dwg
 A/R Proseal 890B Batch: 132655

6-Weld D4463-7 fwd end

PURGE INSIDE OF TANK

7-Weld top D4463-1 using DT9811 and DT9810

① Cpl 15/10.02

DAS
36
9-89 15/09/30

DAS
36
9-89 15/09/30

DAS
36
9-89 15/09/30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 4

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	PURGE INSIDE OF TANK								
123 *123* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo ***Pressure Test as per dwg D4464***	0.00 0.00				/		DAS 43 9-89	OCT 05 2015
140 *140* QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds Memo	0.00 0.00				/		DAS 43 9-89	OCT 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 5

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
143	Outsource process - NDT per QSI038 4.1	0.00							
143									
Outsource2	Memo	0.00							
Outsource process - NDT	ISSUE P/O : <u>29994</u>								
	LPI INSPECTION								
	C OF C IS REQUIRED								
145	Receive & Inspect for Damage & Mat'l Certs	0.00							
145									
Packaging	Memo	0.00							
Packaging									
147	QC5- Inspect part completeness to step on W/O	0.00							
147									
QC	Memo	0.00							
Quality Control									

CY OCT 05 2015 1

OCT 05 2015 / DAS
6
9-89

1 AUG 05 2015 DAS
24
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐			

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 6

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	0.00							
Hand Finishing	1- Alodine on tank. No alodine inside								
160	QC7-Inspect Chemical Conversion Coat	0.00							
160									
QC	Memo	0.00							
Quality Control									
164		0.00							
164									
Small Fab	Memo	0.00							
Small Fab	1- Brush Proseal 890A on all internal sheet metal folds Proseal 8990A Batch: <u>132226, B2655</u> <u>133071</u>								
	2- Assemble as per dwg and for D4577-041/-3/-5 access panels install wet with proseal 890B								
	A/R Proseal 890B Batch: <u>132226, B2655</u> <u>B133071</u>								

15-10-5

1X

15/10/06

DAS
36
9-89

1X

15/10/06

DAS
36
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 8

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/11/15 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/11/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC14- Inspect Spray Paint	0.00							
180									DAS
QC	Memo	0.00							9
Quality Control									9-89
190		0.00							
190									DAS
Small Fab	Memo	0.00							36
Small Fab	1- Install placards, fuel sender, tank support, fuel filler splash guard assy, fuel cap as per dwg								9-89
	2- Abrade surface with red scotch brite and install cushion using contact cement								
	A/R Contact Cement Batch: <u>M132830</u>								
	<u>1300L</u>								
200	QC5- Inspect part completeness to step on W/O	0.00							
200									DAS
QC	Memo	0.00							38
Quality Control									9-89

① 15-10-07

K

15/10/07 DAS 36 9-89

1

OCT 07 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
☐ OTHER : _____					

Work Order ID 134351

Wednesday, July 08, 2015 3:10:48 PM

134351

Page 9

Item ID: D4464-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/11/15

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

Identify as per dwg & Stock Location: _____

0.00

210

Packaging

Memo

0.00

Packaging

OCT 07 2015

63
6-23

220

QC21- Final Inspection - Work Order Release

0.00

220

QC

Memo

0.00

Quality Control

MLJ

OCT 13 2015

MLJ

OCT 13 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	☐ OTHER : _____			

Picklist Print

Wednesday, July 08, 2015 3:10:39 PM

Page 1

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.11.23 NEW ISSUE DD VERF:EC IPP REV:B
12.03.08 AS PER DWG REV.B DD VERF:EC IPP REV:C 12.04.24
ECN 12-571 DD VERF:EC IPP REV:D 13.10.30 DWG
REV PE1 DD VERF:JLM IPP REV:E 14.06.13 AS PER DWG
REV.E DD VERF:JLM IPP REV:F 14.07.21 AS PER DWG REV.F DD
VERF:JLM IPP REV:G 15.01.15 AS PER DWG REV.G DD
VERF:JLM IPP REV:H 15.03.04 AS PER DWG REV.H9 DD
VERF:JLM IPP REV:I 15.06-17 AS PER DWG REV.H DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS20470AD4-6

Purchased

No

Each

1,423.000

8

DAS
36
9-89

MS20470AD4-6

RIVET

**

Location

Loc Qty

Loc Code

CCK004

1423

m131618

1423

D3997-5

Manufactured

No

190

Each

39.0000

2

2

D3997-5

Placard

**

Location

Loc Qty

Loc Code

ST076

39

72611

39

D3997-11

Manufactured

No

190

Each

23.0000

1

1

DAS
30
9-89

D3997-11

Placard

**

Location

Loc Qty

Loc Code

ST077A

23

106884

6

107679

5

127110

12

OCT 07 2015

14

15/0/01

M127305 (8)

15-10-09

SW

137473

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Picklist Print

Page 2

Wednesday, July 08, 2015 3:10:40 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D3997-17

Manufactured No

190 Each

21.0000

1

1

DAS
30
9-89

OCT 07 2015

D3997-17

Placard

**

LocationLoc QtyLoc Code

ST077A

21

107632

9

129866

12

D3997-29

Manufactured No

190 Each

13.0000

1

1

DAS
30
9-89

OCT 07 2015

D3997-29

Placard

**

LocationLoc QtyLoc Code

ST077A

13

106864

1

127111

12

D3997-43

Manufactured No

190 Each

24.0000

1

1

DAS
30
9-89

OCT 07 2015

D3997-43

Placard

**

LocationLoc QtyLoc Code

ST077A

24

106642

3

107558

9

127112

12

D3999-7

Manufactured No

120 Each

10.0000

1

1

DAS
24
9-89***D3999-7***

Corner

**

AUG 01 2015

LocationLoc QtyLoc Code

WA003

10

108621

4

123147

2

130069

4

Wednesday, July 08, 2015 3:10:40 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____																		

Picklist Print

Wednesday, July 08, 2015 3:10:40 PM

Page 3

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4000-1

Manufactured No

120

Each

10.0000

1

1

DAS
36
9-89

D4000-1

Fuel Supply Fitting

Location

Loc Qty

Loc Code

GA

10

128349

2

128899

8

D4000-5

Manufactured No

120

Each

14.0000

1

1

AUG 01 2015

DAS
24
9-89

D4000-5

Fuel Tank Vent Fitting

Location

Loc Qty

Loc Code

WA003

14

106917

4

107388

5

130055

5

D4000-9

Manufactured No

120

Each

25.0000

3

3

DAS
36
9-89

D4000-9

Grommet

Location

Loc Qty

Loc Code

WA003

25

106808

11

123024

14

D4000-045

Manufactured No

120

Each

2.0000

1

1

DAS
36
9-89

D4000-045

Fuel Pickup Fitting Assembly

Location

Loc Qty

Loc Code

WA003

2

122673

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐													
Date :		Step #:		QTY Effective :			MRB (Q51042) Approval										
Description Work Order Deviation				Disposition				Completed By									
								Lead hand / Supervisor Approval Verification									
								QC / QA Coordinator Approval									
Root Cause		FAULT CATEGORY															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :									
Misidentified ☐	Past Due ☐																

Picklist Print

Wednesday, July 08, 2015 3:10:42 PM

Page 4

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4008-11 Manufactured No

120 Each 14.0000 1 1

D4008-11

Hinge Half

15/10/01 DAS 36 9-89

Location

Loc Qty

Loc Code

GA 12
129867 12
WA003 2
122600 2

D4008-041 Manufactured No

190 Each 7.0000 1 1

D4008-041

Fuel Filler Splash Guard Assembly

DAS 36 9-89 OCT 07 2015

Location

Loc Qty

Loc Code

ST249 3
130040 3
ST249A 4
128582 4

D4023-3 Manufactured No

190 Each 13.0000 1 1

D4023-3

Cap And Flange

DAS 43 9-89 AUG 26 2015

Location

Loc Qty

Loc Code

WA003 13
106700 2
120208 4
129761 4
130907 1
132479 2

B129761 → 1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	☐ OTHER : _____			

Picklist Print

Page 5

Wednesday, July 08, 2015 3:10:42 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4025-5

Manufactured No

190

Each

14.0000

1

1

DAS
30
9-89

OCT 07 2015

D4025-5

Fuel Quantity Sender

**

Location

Loc Qty

Loc Code

ST232B

14

106832

2

121582

1

127571

3

129924

4

132650

4

D4057-1

Manufactured No

120

Each

52.0000

3

3

DAS
36
9-89

D4057-1

Retaining Ring

**

Location

Loc Qty

Loc Code

WA003

52

106766

5

107269

47

D4062-041

Manufactured No

190

Each

3.0000

1

1

D4062-041

Tank Support Assembly

**

Location

Loc Qty

Loc Code

prelim

3

128383

3

D4125-1

Manufactured No

120

Each

5.0000

1

1

DAS
43
9-89

AUG 26 2015

D4125-1

Fwd Sediment Bowl

**

Location

Loc Qty

Loc Code

WA003

5

130323

5

Wednesday, July 08, 2015 3:10:43 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Wednesday, July 08, 2015 3:10:43 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4125-3 Manufactured No

120 Each 8.0000 1 1

DAS
43
9-89

JUL 21 2015

✓ ***D4125-3***

Aft Sediment Bowl

**

B 130324 → 1

Location Loc Qty Loc Code

WA003 8

130324 8

D4404-5 Manufactured No

120 Each 17.0000 2 2

DAS
30
9-89

OCT 07 2015

D4404-5

Cushion, Fwd

**

Location Loc Qty Loc Code

ST517 17

127570 5

129922 2

133965 10

D4462-1 Manufactured No

112 Each 4.0000 1 1

DAS
36
9-89

✓ ***D4462-1***

Baffle

**

15/07/21

Location Loc Qty Loc Code

WA003 4

129269 1

129984 3

D4462-3 Manufactured No

112 Each 5.0000 1 1

DAS
36
9-89

✓ ***D4462-3***

Baffle

**

15/07/21

Location Loc Qty Loc Code

WA003 5

129270 2

130041 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																																							
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																																																																																																																			
Description Work Order Deviation				Disposition				Completed By																																																																																																																																																			
								Lead hand / Supervisor Approval Verification																																																																																																																																																			
								QC / QA Coordinator Approval																																																																																																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="6" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td style="width: 10%;">Environment</td><td>☐</td> <td style="width: 10%;">No Re-verification</td><td>☐</td> <td style="width: 10%;">Pressure/Forced</td><td>☐</td> <td style="width: 10%;">Temperature/Cure</td><td>☐</td> <td style="width: 10%;">Power Loss/Surge</td><td>☐</td> <td style="width: 10%;">Positioned Wrong</td><td>☐</td> </tr> <tr> <td>Design</td><td>☐</td> <td>Operator</td><td>☐</td> <td>Bending</td><td>☐</td> <td>Set-up</td><td>☐</td> <td>Folio/Program</td><td>☐</td> <td>Outside Dimensions</td><td>☐</td> </tr> <tr> <td>Doc/Data</td><td>☐</td> <td>Offset/Setup</td><td>☐</td> <td>Centre Not Concentric</td><td>☐</td> <td>BOM/Route</td><td>☐</td> <td>Grain</td><td>☐</td> <td>Over/Under tolerance</td><td>☐</td> </tr> <tr> <td>Equip/Tooling</td><td>☐</td> <td>Supplier</td><td>☐</td> <td>Cracks</td><td>☐</td> <td>Broken/Damage/Defect</td><td>☐</td> <td>Weld</td><td>☐</td> <td>Part Incorrect</td><td>☐</td> </tr> <tr> <td>Handling/Pre</td><td>☐</td> <td>Training</td><td>☐</td> <td>Crimp/Kink/Ripple/Wave</td><td>☐</td> <td>Inspection Incomplete/Unqualified</td><td>☐</td> <td>Wrong Stock Pulled</td><td>☐</td> <td>Part Lost/Missing</td><td>☐</td> </tr> <tr> <td>Material</td><td>☐</td> <td>Use for Testing</td><td>☐</td> <td>Cuffs</td><td>☐</td> <td>Contamination</td><td>☐</td> <td>Out of Sequence</td><td>☐</td> <td>Part Moved</td><td>☐</td> </tr> <tr> <td>Internal Transport</td><td>☐</td> <td>Poor Information</td><td>☐</td> <td>Crushing</td><td>☐</td> <td>Countersink</td><td>☐</td> <td>Off-set</td><td>☐</td> <td>Drawing</td><td>☐</td> </tr> <tr> <td>Tribal Knowledge</td><td>☐</td> <td>Rushing</td><td>☐</td> <td>Heat Treat</td><td>☐</td> <td>Cut Too Short</td><td>☐</td> <td>Mislabeled</td><td>☐</td> <td>Finish</td><td>☐</td> </tr> <tr> <td>LOA</td><td>☐</td> <td>Product Improvement</td><td>☐</td> <td>Wave/Twist in Tube</td><td>☐</td> <td>Instructions Incomplete/Unclear</td><td>☐</td> <td>Fit/Function</td><td>☐</td> <td>Misread</td><td>☐</td> </tr> <tr> <td>Substation</td><td>☐</td> <td>Process Improvement</td><td>☐</td> <td>Marks/Chatter</td><td>☐</td> <td>Drill Holes</td><td>☐</td> <td>Misaligned/off center</td><td>☐</td> <td>Turning Sequence</td><td>☐</td> </tr> <tr> <td>Past Expiry Date</td><td>☐</td> <td>Manufacturing Process</td><td>☐</td> <td colspan="8" rowspan="2" style="vertical-align: top;">OTHER :</td> </tr> <tr> <td>Misidentified</td><td>☐</td> <td>Past Due</td><td>☐</td> </tr> </tbody> </table>										Root Cause				FAULT CATEGORY						Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐	Past Expiry Date	☐	Manufacturing Process	☐	OTHER :								Misidentified	☐	Past Due	☐
Root Cause				FAULT CATEGORY																																																																																																																																																							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐																																																																																																																																																
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐																																																																																																																																																
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐																																																																																																																																																
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐																																																																																																																																																
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐																																																																																																																																																
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐																																																																																																																																																
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐																																																																																																																																																
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐																																																																																																																																																
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐																																																																																																																																																
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐																																																																																																																																																
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :																																																																																																																																																							
Misidentified	☐	Past Due	☐																																																																																																																																																								

Picklist Print

Wednesday, July 08, 2015 3:10:43 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4463-041

Manufactured No

120 Each 2.0000 1 1

DAS

D4463-041

**

SEP 29 2015

24
9-89

Tank Top Assembly

Location

Loc Qty

Loc Code

WA003

2

127344

2

1

D4463-3

Manufactured No

120 Each 7.0000 1 1

DAS

D4463-3

**

SEP 29 2015

24
9-89

Tank Aft End

Location

Loc Qty

Loc Code

WA003

7

122835

1

123531

2

130066

4

D4463-5

Manufactured No

120 Each 22.0000 1 1

DAS

D4463-5

**

AUG 01 2015

24
9-89

Tank Upper Cut Out

Location

Loc Qty

Loc Code

WA003

22

106751

14

120923

2

121024

6

D4463-7

Manufactured No

120 Each 6.0000 1 1

DAS

D4463-7

**

SEP 29 2015

24
9-89

Tank Fwd End

Location

Loc Qty

Loc Code

WA003

6

121172

2

123128

2

130052

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

Page 8

Wednesday, July 08, 2015 3:10:44 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4463-9 Manufactured No

112 Each 5.0000 1 1

✓ ***D4463-9***

Tank Back

**

15/04/21

DAS
36
9-89

Location

Loc Qty

Loc Code

WA003

5

127752

5

D4463-11 Manufactured No

112 Each 6.0000 1 1

✓ ***D4463-11***

Tank Front

**

DAS
43
JUL 21 2015

Location

Loc Qty

Loc Code

WA003

6

127699

4

128253

2

D4463-13 Manufactured No

190 Each 5.0000 1 1

✓ ***D4463-13***

Tank Bottom

**

DAS
43
9-89
JUL 21 2015

Location

Loc Qty

Loc Code

WA003

5

129425

5

D4577-041 Manufactured No

190 Each 7.0000 1 1

D4577-041

Fwd Access Panel Assembly

**

DAS
30
9-89

OCT 07 2015
~~9107 / 0130~~

Location

Loc Qty

Loc Code

ST234

7

106703

7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐	

Picklist Print

Page 9

Wednesday, July 08, 2015 3:10:45 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4577-1

Manufactured No

190

Each

3.0000

1

1

D4577-1

Rear Access Panel

BAS
27
9-89

Location

Loc Qty

Loc Code

ST233A

3

124494

3

D4577-3

Manufactured No

190

Each

4.0000

1

1

D4577-3

Middle Access Panel

BAS
27
9-89

Location

Loc Qty

Loc Code

ST233A

3

106697

2

120991

1

WA003

1

128100

1

D4968-1

Manufactured No

190

Each

4.0000

1

1

D4968-1

Side Cushion

BAS
27
9-89

Location

Loc Qty

Loc Code

prelim

1

110413

1

ST400

3

120927

1

133967

2

OCT 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Wednesday, July 08, 2015 3:10:46 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

D4975-1

Manufactured No

Each

3.0000

1

D4975-1

Bracket

DAS
36
9-89

Location

Loc Qty

Loc Code

GA
131674
WA003
120928
128259

1
1
2
1
1

15/10/01
B135338 (1x)
~~B106766~~
(1x)

AN3-5A

Purchased No

Each

284.0000

24

AN3-5A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

CA
m129682
GA
m131420

132
132
152
152

m133334 24

AN3H5A

Purchased No

Each

47.0000

5

AN3H5A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

ST349
m132680
ST350
m127044

25
25
22
22

AN3-7A

Purchased No

Each

33.0000

4

AN3-7A

Bolt

DAS
001275 2015
9-89

Location

Loc Qty

Loc Code

ST349
131420

33
33

m132803 4

Wednesday, July 08, 2015 3:10:46 PM

Shop Packet Print

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
Root Cause				FAULT CATEGORY																					
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐		Power Loss/Surge ☐		Positioned Wrong ☐															
Design ☐		Operator ☐		Bending ☐		Set-up ☐		Folio/Program ☐		Outside Dimensions ☐															
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐		Grain ☐		Over/Under tolerance ☐															
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐		Weld ☐		Part Incorrect ☐															
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐		Wrong Stock Pulled ☐		Part Lost/Missing ☐															
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐		Out of Sequence ☐		Part Moved ☐															
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐		Off-set ☐		Drawing ☐															
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐		Mislabeled ☐		Finish ☐															
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐		Fit/Function ☐		Misread ☐															
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐		Misaligned/off center ☐		Turning Sequence ☐															
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____																					
Misidentified ☐		Past Due ☐																							

Picklist Print

Page 11

Wednesday, July 08, 2015 3:10:46 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-4

Purchased

No

Each

3,603.000

4

MS20426AD4-4

**

Rivet

Location

Loc Qty

Loc Code

GA

385

125445

385

ST310

3030

m132536

3030

ST312

188

125445

188

Each

1,409.000

165

MS20470AD4-4

Purchased

No

MS20470AD4-4

**

Rivet, Universal Head

Location

Loc Qty

Loc Code

GA

1396

M132536

1396

ST310

13

118614

13

DAS
36
9-89

15/09/30

DAS
36
9-89

15/07/21

M133077
5x

Wednesday, July 08, 2015 3:10:47 PM

Shop Packet Print

Page 11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Picklist Print

Wednesday, July 08, 2015 3:10:47 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

190

Each

1,445.000

4

4

MS21042L3

NAS
27
9-89

Nut

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

436

M131317

436

ST305

616

116549

12

126333

49

M128401

2

M128754

2

M132123

17

M132382

534

m133134

4

NAS1149D0332J

Purchased

No

190

Each

2,795.000

13

13

NAS1149D0332J

NAS
27
9-89

Washer

Location

Loc Qty

Loc Code

CA

14

m129682

14

ST269

2606

m130325

930

m131624

76

m132677

1600

ST270

175

m132189

175

13

OUT 115 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition																					
								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :																							
Misidentified ☐	Past Due ☐																								

Picklist Print

Page 13

Wednesday, July 08, 2015 3:10:47 PM

Work Order ID: 134351

134351

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/11/15

Required Date: 7/11/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

190

Each

2,109.000

24

24

NAS1149D0363.J

**

DAS

Washer

27

9.89

Location

Loc Qty

Loc Code

CA

569

m130799

569

GA

1126

m128429

138

m132677

988

ST269

414

m126319

7

m131618

1

m132317

406

M133031

24

OCT 05 2015

* NAS1149D0316J

M M132677

IX

DAS
30
9.89

9107 20 100

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											

ITEM	QTY -041	PART NUMBER	DESCRIPTION
	X	D4464-041	FUEL TANK ASSEMBLY
1	2	D3997-5	PLACARD (AUX FUEL DRAIN)
2	1	D3997-11	PLACARD (LOADING)
3	1	D3997-17	PLACARD (STOWAGE)
4	1	D3997-29	PLACARD (WARNING)
5	1	D3997-43	PLACARD (EARTH)
6	1	D3999-7	CORNER
7	1	D4000-1	FITTING
8	1	D4000-5	FUEL TANK VENT FITTING
9	3	D4000-9	GROMMET
10	1	D4000-045	FUEL PICK UP AND STRAINER ASSEMBLY
11	1	D4008-11	TANK HINGE HALF
12	1	D4008-041	FUEL FILLER SPLASH GUARD ASSEMBLY
13	1	D4023-3	FUEL CAP AND FLANGE
14	1	D4025-5	FUEL SENDER
15	3	D4057-1	RETAINER
16	1	D4062-041	TANK SUPPORT
17	1	D4125-1	FWD SEDIMENT BOWL
18	1	D4125-3	AFT SEDIMENT BOWL
19	2	D4404-5	CUSHION, FWD
20	1	D4462-1	BAFFLE
21	1	D4462-3	BAFFLE
22	1	D4463-041	TOP TANK ASSEMBLY
23	1	D4463-3	TANK AFT END
24	1	D4463-5	TANK UPPER CUT OUT
25	1	D4463-7	TANK FORWARD END
26	1	D4463-9	TANK BACK
27	1	D4463-11	TANK FRONT
28	1	D4463-13	TANK BOTTOM
29	1	D4577-041	FWD ACCESS PANEL ASSEMBLY
30	1	D4577-1	REAR ACCESS PANEL
31	1	D4577-3	MIDDLE ACCESS PANEL
32	1	D4968-1	CUSHION, SIDE
33	1	D4975-1	ANGLE BRACKET
34	24	AN3-5A	BOLT
35	5	AN3H5A	BOLT
36	4	AN3-7A	BOLT
37	4	MS20426AD4-4	RIVET, CSK
38	165	MS20470AD4-4	RIVET, PANHEAD
39	8	MS20470AD4-6	RIVET, PANHEAD
40	4	MS21042L3	NUT
41	13	NAS1149D0332J	WASHER
42	24	NAS1149D0363J	WASHER

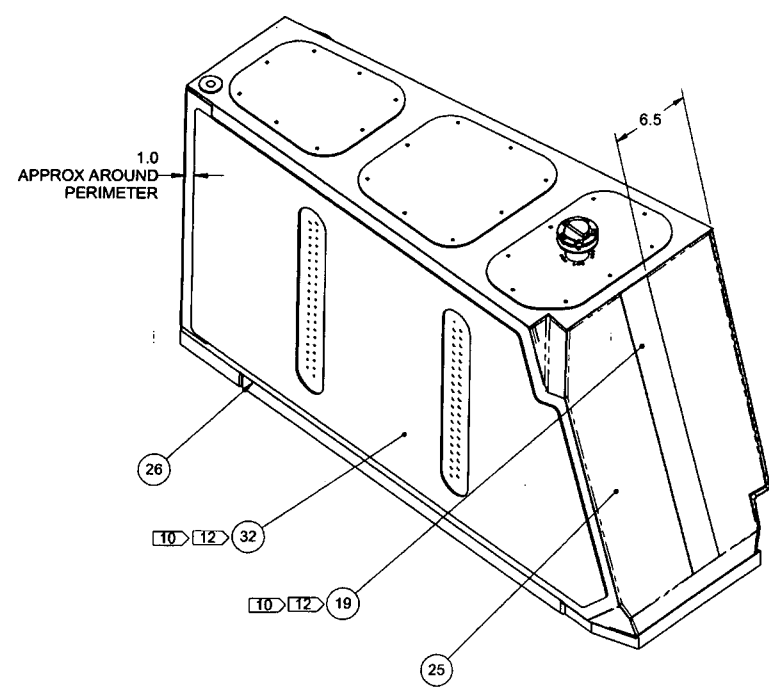
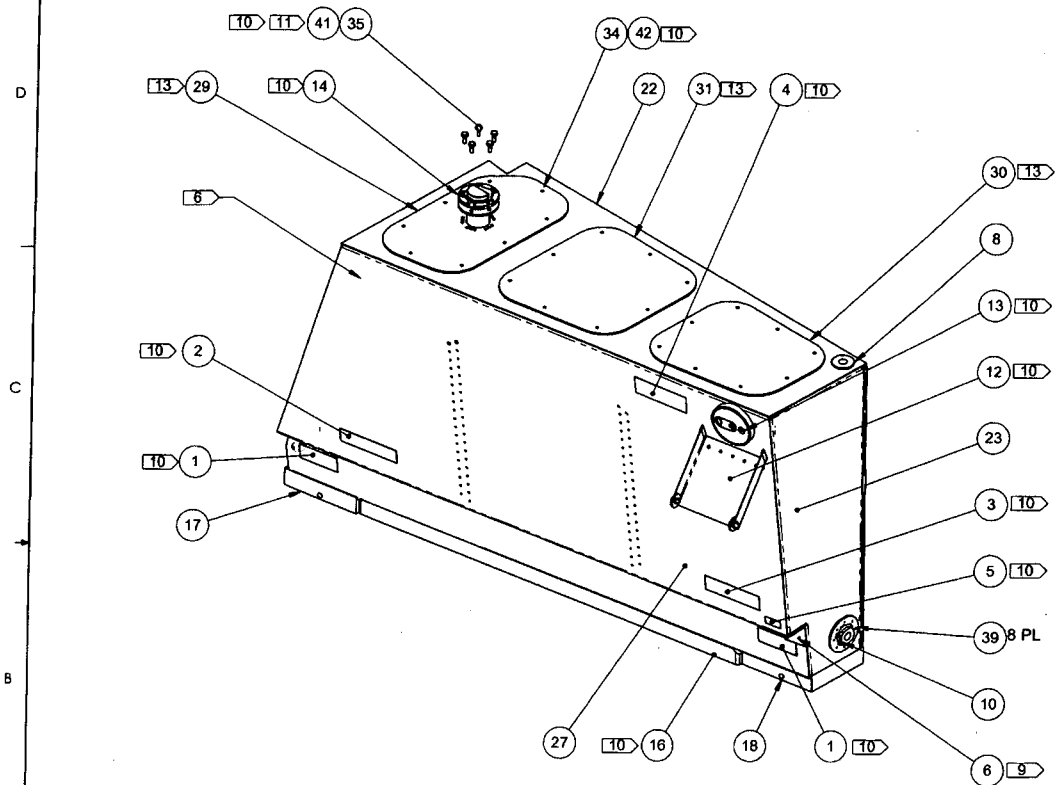
SUBMIT
 134351 MLC
 15-07-09

RELEASED
 2015-06-18
 ECU 15-583

H	REPLACED NOTE 8 (SHT 2), ADDED NOTE 14 (SHT 2), ADDED AUXILIARY VIEW (SHT 3), ADDED NOTE 15 (SHT 4), REPLACED NOTE 13 (SHT 5), SHT 4 WAS SHT 3, SHT 5 WAS SHT 4, REMOVED D4124-1 TABS & AN3-6A BOLTS, CHEMICAL CONVERSION COAT NOW AFTER WELDING (SHT 5), ADD AN3-7A BOLTS	CC	15.02.06
G	FINISH "FLAT GREY" WAS "GREY" (SHT 2); PICTORIAL UPDATE FOR D4000-1 & D4462-1	AP	14.12.05
F	AN3-5A WAS AN3C4A QTY. 24 (ZN D6-2) AN3H5A WAS AN3-5A QTY. 5 (ZN D7-2) MS20470AD4-6 WAS MS20426AD4-6 QTY. 8 (ZN B5-2) D4000-1 IS NO LONGER INSTALLED WITH COUNTERSUNK RIVETS UPDATE NOTE 10 ON SHEET 3	ML	14.06.27
E	UPDATED -041 WITH RE-DESIGNED D4463-3/-0/-11 AND D4462-1/-3. D4968-1 REPLACES D4404-5 ON TANK SIDE (ZN C3-2) REF NCR 13-3100 AN3-6A REPLACES MS35206-266 (ZN B6-2) NAS1149D0332J REPLACES 5 X NAS1149D0363J (ZN D7-2) REF PAR 12-217 D4975-1 REPLACES D3999-9 (ZN C3-2) REMOVED TAB D3999-11 AND MOVED D3997-43 PLACARD (ZN B6-5) UPDATED BILL OF MATERIALS REVISED ALL NOTES REMOVED SHEET 5	ML	14.05.13
D	ADDED NOTE RE HAND FORMING D4124-1, ZN A8-4.	DC	12.05.02
C	UPDATED -041 WITH RE-DESIGNED D4463-11/-13 REV. C PARTS, ZN B6-2. UPDATED -041 WITH RE-DESIGNED D4577-041/-3/-5 PARTS, ZN C6-2.	DC	12.03.27
B	UPDATED -041 WITH RE-DESIGNED PARTS. REMOVED D4463-13. ADDED D4577-041/-1/-5 ACCESS PANELS, ZN C6-2.	DC	11.12.14
A	NEW ISSUE. REF PAR11-117 & CAR 11-54.	DC	11.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

APPROVED

8 7 6 5 4 3 2 1



D4464-041 FUEL TANK ASSEMBLY

NOTES:

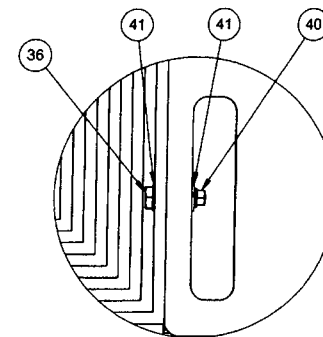
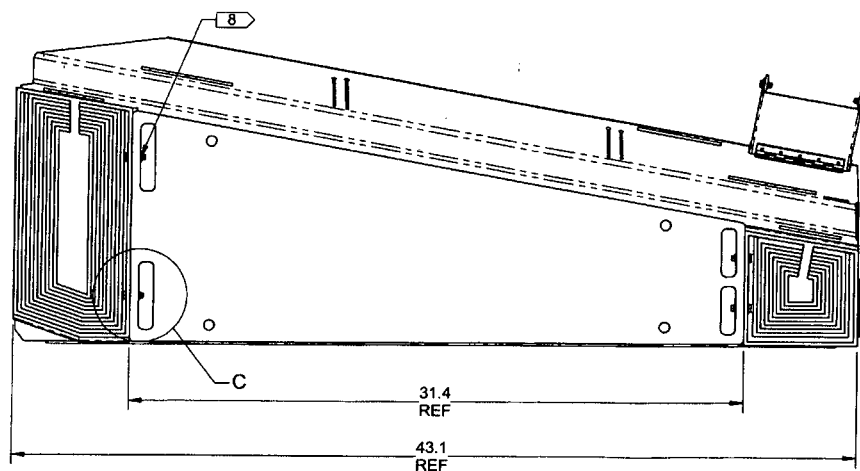
- 1) MATERIAL: N/A
- 2) FINISH: PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2.1
PAINT FLAT GREY (4.2.2.3) PER DART QSI 005 4.2.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D350-794-141" USING D2729-1 RED DECAL
- 7) WEIGHT: 39.52 lbs
- 8) LPI AND PRESSURE TEST PER DART QSI 038 6.3
- 9) MASK PRIOR TO FINISH
- 10) INSTALL AFTER FINISH
- 11) LOCKWIRE BOLTS AFTER INSTALLATION PER AC 43.13 OR MS33540
- 12) INSTALL CUSHION USING CONTACT CEMENT. TRIM TO FIT IF REQUIRED
- 13) INSTALL D4577-041/-1/-3 ACCESS PANELS WET WITH PROSEAL P/S 890B.

RELEASED
2015-06-18

APPROVED

DESIGN	ML	DART AEROSPACE LTD	
DRAWN	CC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



DETAIL C
SCALE 3X

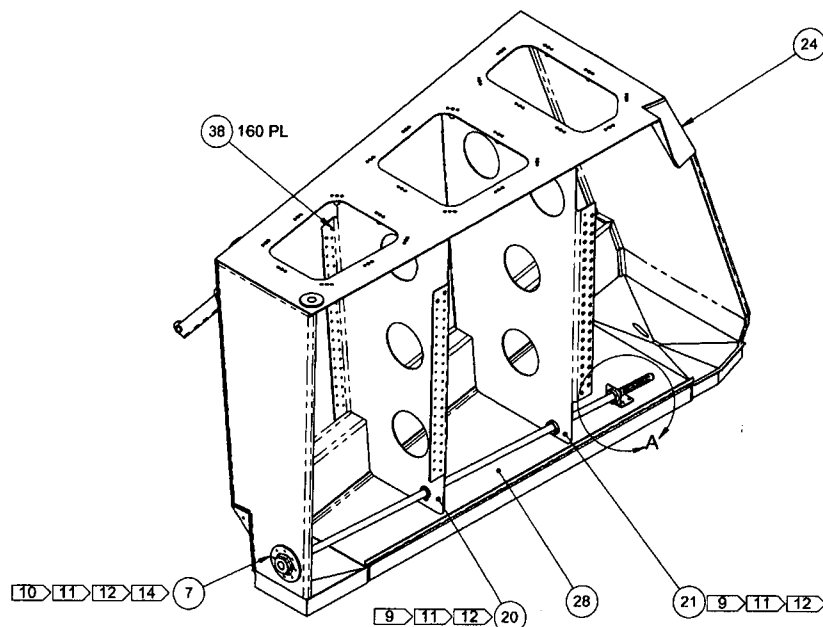
D4464-041 FUEL TANK ASSEMBLY
AUXILIARY VIEW

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) TRANSFER DRILL HOLES FROM D4125-1/-3 SEDIMENT BOWLS TO D4062-041 TANK SUPPORT ASSEMBLY

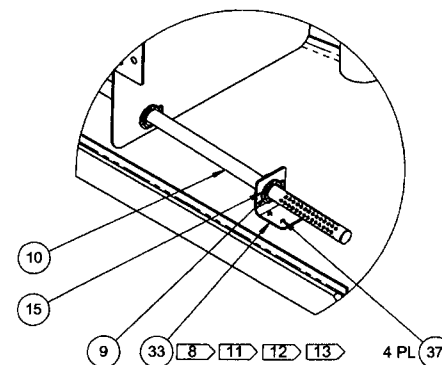
APPROVED

DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2015-06-18



D4464-041 FUEL TANK ASSEMBLY 
D4463-9 TANK BACK REMOVED
TO SHOW INTERIOR DETAIL



DETAIL A
ROTATED FOR CLARITY
SCALE 2X

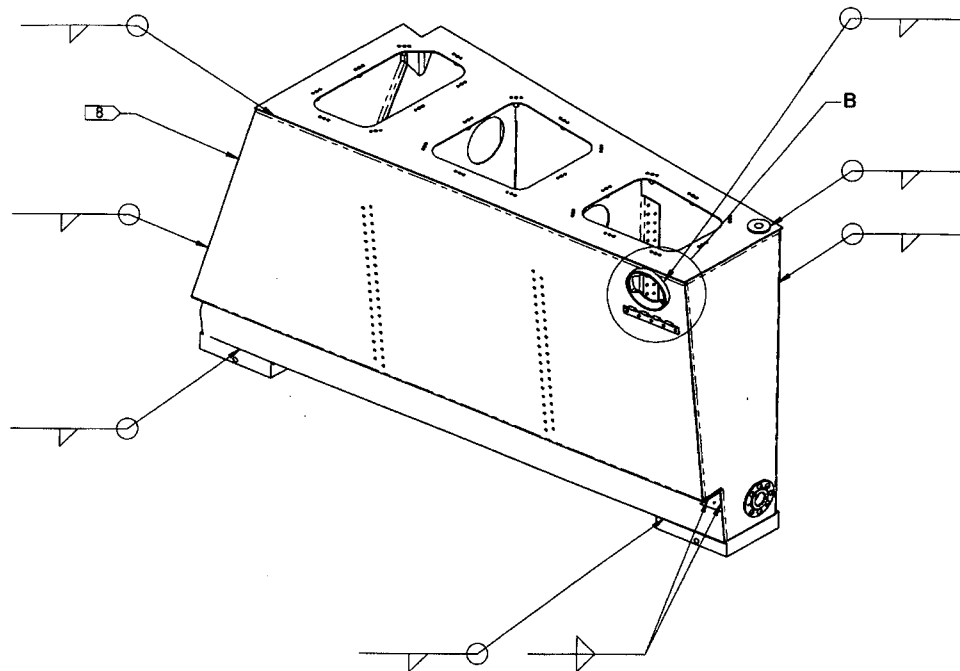
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) COAT FAYING SURFACES OF D4975-1 ANGLE BRACKET AND D4463-13 TANK BOTTOM WITH PROSEAL P/S 890B AND WET INSTALL MS20426AD4-4 RIVETS
- 9) COAT FAYING SURFACES OF D4462-1/-3 BAFFLES AND D4463-9/-11 TANK FRONT/BACK WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
- 10) COAT FAYING SURFACES OF D4000-1 FUEL SUPPLY FITTING AND D4463-3 TANK AFT END WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-6 RIVETS
- 11) FILLET SEAL THE INTERIOR OF THE TANK AROUND THE EDGE OF D4975-1 ANGLE BRACKET, D4462-1/-3 BAFFLES AND D4000-1 FUEL SUPPLY FITTING WITH PROSEAL P/S 890B
- 12) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B
- 13) TRANSFER DRILL $\varnothing 0.128$ HOLES FROM D4975-1 ANGLE BRACKET INTO D4463-13 TANK BOTTOM AND COUNTERSINK HOLES $\varnothing 0.225 \times 100^\circ$ FROM THE OUTSIDE OF THE TANK
- 14) INSTALL D4000-1 FITTING WITH FLAT FACING UPWARDS
- 15) BRUSH PROSEAL 890A ON ALL INTERNAL SHEET METAL FOLDS

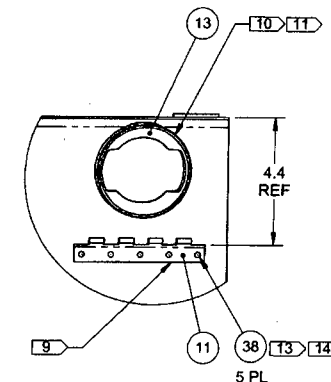
APPROVED

DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	AP	DRAWING NO. D4464	REV. H
MFG. APPR.	DD	SHEET 4 OF 5	
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

RELEASED
2015-06-16



D4464-041 FUEL TANK ASSEMBLY
WELDING AND RIVETING DETAIL



DETAIL B
ROTATED FOR CLARITY
SCALE 2X

RELEASED
2015-06-16

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) TRIM FLANGES AS REQUIRED TO FIT ASSEMBLY
 - 9) CENTER HINGE BELOW FUEL CAP FLANGE
 - 10) POSITION FUEL CAP FLANGE AS SHOWN, ELONGATED HOLE APPROXIMATELY HORIZONTAL
 - 11) POSITION FUEL CAP FLANGE SO THAT INNER FACE IS FLUSH WITH INSIDE OF TANK
 - 12) WELD PER DART QSI 004
 - 13) COAT FAYING SURFACES OF D4008-11 TANK HINGE HALF AND D4463-11 TANK FRONT WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
 - 14) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B

APPROVED

DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 5 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO25969	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO29994
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

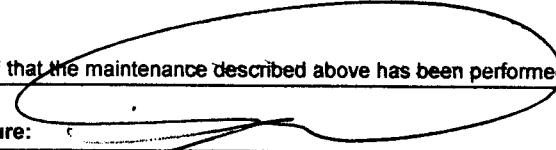
Work Required:

CARRY OUT NDT ON 1 FUEL TANK, ITEM ID# D4464-041 , WORK ORDER ID# 134351 AS PER PO

Action Taken:						Date:	Initial/Stamp:
LPI C/O IAW ASTM E-1417M-13						OCT 02 2015	 
NO LEAK DETECTED ON WELD AREAS							
SURFACE CRACKS FOUND ON MULTIPLE AREAS MARKED IN RED							
PEN. ZL-56, MPO13600, UV M-20141, CLEANER SKC-S MPO13923 , DEV. MPO11715							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

15/10/15
sy

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp 	Date: OCT 02 2015
Name: RAFIK MELIKIAN		